

# GOLDENGATE AND ORACLE WAREHOUSE BUILDER FOR REAL-TIME DATA WAREHOUSING



## SOLUTION

GoldenGate Software and Oracle offer products that work together to deliver a full-featured Enterprise Data Warehouse.

## KEY FEATURES

The joint solution of GoldenGate TDM and Oracle Warehouse Builder offers:

- › Real-time data acquisition for operational BI without batch windows
- › ELT architecture to boost data integration performance and reduce data movement
- › Support for complex SQL and PL/SQL transformations in ETL systems
- › No requirement for a middle-tier ETL server
- › Enhanced developer productivity with declarative design, dimensional modeling, and integrated data quality
- › Exceptional flexibility and easy re-configuration
- › Lower total cost of ownership

## ACHIEVING REAL-TIME BI WITH HIGH PERFORMANCE AND LOW TCO

Today's Enterprise Data Warehouse (EDW) is at the heart of the business operations responsible for housing critical data and facilitating analysis for better business decisions. Increasingly, the EDW must deliver fresher and fresher information for operational decision making across the enterprise and incorporate growing amounts of data from an increasingly diverse variety of data sources. Real-time data integration allows users at all levels to leverage up-to-date information for enhanced business intelligence, so they can gain advantage in today's and tomorrow's competitive landscape.

As more users access the EDW for day-to-day operations, performance and scalability become critical requirements for successful adoption. In addition, with today's tightened IT budgets, companies need to work with solutions that have a low total cost of ownership (TCO).

GoldenGate Software and Oracle offer products that complement each other and provide data integration capabilities for a real-time, high performance data warehousing solution:

**GoldenGate Software's Transactional Data Management (TDM)** platform provides real-time data acquisition capabilities for the warehouse, by capturing changed data from disparate heterogeneous sources and delivering that data to the data warehouse instantaneously without any batch windows.

**Oracle Warehouse Builder** is the data integration product for the Oracle database customer. It is a comprehensive data integration solution with fully integrated relational and dimensional modeling, data quality, data auditing, and full life cycle management of data and metadata.

The combined solution of GoldenGate TDM and Oracle Warehouse Builder eliminates the need for a transformation server, commonly required by traditional ETL products, and minimizes data movement. With change data capture capabilities from heterogeneous systems and support for in-database transformations, the solution provides a simpler and more efficient architecture, as well as a lower total cost of ownership, for real-time Oracle data warehouses.

### Key features of the combined solution:

**Real-Time, Low-Impact Data Movement** – GoldenGate TDM captures committed transactions from one or more heterogeneous sources without impacting their performance and instantly delivers that changed data to the target system(s). It does not require an intermediate server and its associated costs. GoldenGate continuously moves the data into the staging area of the data warehouse with only sub-second latency, and allows the most current data to be always available for timely business intelligence. And because it captures data from database transaction logs and moves only the changed data, the overhead imposed on the sources and IT infrastructure is negligible.

**Heterogeneity and Flexibility** – GoldenGate TDM features an architecture that decouples source and target systems, enabling heterogeneity of databases, operating systems, and hardware platforms, for the most cost-effective infrastructure. GoldenGate provides real-time log-based capture from a wide range of databases including Oracle, SQL Server, DB2 z/Series and LUW, Sybase, Ingres, HP Enscribe, SQL/MP and SQL/MX, and Teradata. The product

*(continued)*

## GOLDENGATE TDM: SUPPORTED DATABASES AND PLATFORMS

### Databases – Capture:

- > Oracle
- > DB2
- > Microsoft SQL Server
- > Sybase ASE
- > Teradata
- > Ingres
- > Enscribe
- > SQL/MP
- > SQL/MX

### Databases – Delivery:

- > All listed above
- > MySQL, HP Neoview
- > And any ODBC compatible databases

### Platforms:

- > Windows 2000, 2003, XP
- > Linux
- > Sun Solaris
- > HP NonStop
- > HP-UX
- > HP TRU64
- > IBM AIX
- > IBM z/OS

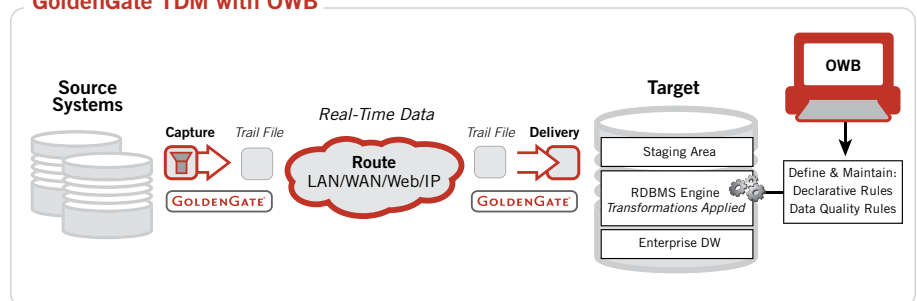
supports major platforms such as Linux, UNIX, Windows, Solaris, AIX, and HP Nonstop. Companies can quickly and easily involve new or different database sources and/or target systems in their configurations by simply adding new GoldenGate Capture and Delivery processes.

**Data Transformations Executed Inside the Data Warehouse (“ELT Approach”)** – Instead of relying on a separate ETL transformation server, Oracle Warehouse Builder’s ELT architecture generates SQL, PL/SQL, or bulk loader scripts and transforms the data within the Oracle database. The ELT architecture extracts data from staging tables, to which GoldenGate TDM delivers changed data in real time. OWB loads the data into user tables and transforms it using the processing power of the database. By reducing network traffic through GoldenGate’s change data capture capabilities and transforming data directly in the data warehouse database, OWB’s ELT architecture delivers the highest possible performance for a lower cost of ownership.

**Integrated Data Quality and Metadata Management** – OWB integrates data profiling, data rules (or business rules) and information compliance features into ETL processing. Data profiling results can be used to automatically generate data correction transformations applied as data is loaded into the target warehouse. With its Warehouse Builder Dependency Management services, OWB allows users to proactively manage metadata changes within the organization and enhance metadata quality.

**Reliability** – Data warehouses that receive continuous data streams need to have a solution to protect against data loss during planned and unplanned outages. GoldenGate TDM is designed for redundancy and reliability, minimizing costly data loss or corruption even during system or network outages. Captured data is immediately stored in a universal data format within GoldenGate Trail Files, which can reside on both the source and target servers but outside the databases. Once the system(s) are back online again, the Trail Files retain the last capture of changed data, and immediately apply it to the target database.

### GoldenGate TDM with OWB



## ABOUT ORACLE

Oracle (NASDAQ GS: ORCL) is the world’s largest enterprise software company. For more information about Oracle, please visit the Web site at [www.oracle.com](http://www.oracle.com).

## ABOUT GOLDENGATE SOFTWARE

GoldenGate Software Inc. is a leading provider of high availability and real-time data integration solutions for improving the availability, accessibility and performance of critical data across heterogeneous enterprise IT environments. More than 500 enterprises use GoldenGate solutions worldwide, including Visa, Bank of America, UBS, DIRECTV, Comcast and Mayo Foundation, to standardize on GoldenGate solutions for real-time access to real-time information.